

**Notice of Allowability**

Application No.

10/823,894

Examiner

Sandra M. Nolan-Rayford

Applicant(s)

SHIFMAN, JERRY

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the 01 February 2005 submissions.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 13 February 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 07 April 2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20050425.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

*S. M. Nolan-Rayford*  
**SANDRA NOLAN RAYFORD**  
**PRIMARY EXAMINER**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Joseph Tassone (937/226.5725) on 25 April 2005.

The application has been amended as follows:

#### In the Title

The title has been amended to read: FUEL HOSE AND ITS PRODUCTION.

#### In the Specification

Page 1, in the line just below "Cross-Reference to Related Applications", after "Serial No.", the text has been amended to read:

-- 10/071,634, filed February 7, 2002, and now abandoned, --

#### **Remarks**

The first-filed application's serial number, filing date and status have been corrected/inserted in the specification.

#### ***Comment re: Declaration***

3. During the telephone interview, Applicant's attorney was advised that the parent application, SN. 10/071,634, was incorrectly recited as "09/071,634" in the declaration. Applicant should submit a supplemental declaration to correct the citation.

### **REASONS FOR ALLOWANCE**

4. The following is an examiner's statement of reasons for allowing claims 1-20:

5. The base claims, i.e., claims 1, 11 and 12, can be summarized as follows:

Claim 1 covers a flexible fuel hose that includes:

1) a barrier layer as an inner tubular structure, the barrier layer comprises a blend of:

a. 5 to 95 wt% for a first fluoropolymer (FP) having a fluorine (F) content of about 68 to 74 wt%, the first FP being an elastomeric co/terpolymer formed from 2+ monomers selected from the group consisting of: hexafluoropropylene (HFP), vinylidene fluoride (VDF) and tetrafluoroethylene (TFE), and

b. 5 to 95 wt% of a second FP having an F content of 73 to 78 wt%, said second FP comprising a terpolymer of copolymerized HFP, VDF and TFE units, wherein the second FP is thermoplastic, and

2) a synthetic elastomer forming a second tubular structure around the barrier layer.

Claim 11 covers a flexible fuel hose comprising:

-a first inner tubular structure made from a barrier layer comprising a blend of:

a. 5 to 95 wt% for a first FP having an F content of about 68 to 74 wt%, the first FP being an elastomeric co/terpolymer formed from 2+ monomers selected from the group consisting of: HFP, VDF and TFE, and

b. 5 to 95 wt% of a second FP having an F content of 73 to 78 wt%, said second FP comprising a terpolymer of copolymerized HFP, VDF and TFE units, wherein the second FP is thermoplastic,

-a second tubular structure formed around the first structure, which second structure comprises a synthetic elastomeric material selected from the group consisting of acrylonitrile/butadiene rubber, epichlorohydrin, ethylene/acrylate rubber and mixtures thereof,

-a reinforcing member comprising natural or synthetic fibers selected from the group consisting of fibers of: glass, cotton, polyamides, polyesters and rayon, and

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-a protective cover comprising a synthetic elastomer selected from the group consisting of styrene/butadiene rubber, butadiene/nitrile rubber, chlorinated polyethylene, chlorosulfonated polyethylene, vinylethylene/acrylic rubber, acrylic rubber, epichlorohydrin rubber, ethylene oxide/epichlorohydrin copolymer, polychloroprene rubber, polyvinyl chloride, ethylene/propylene copolymers, ethylene/propylene/diene terpolymers, ultra high molecular weight polyethylene, high density polyethylene and blends thereof.

Claim 12 covers a method of making a flexible fuel hose comprising the steps:

- 1) extruding a first tubular structure comprising a blend of:
  - a. 5 to 95 wt% for a first FP having an F content of about 68 to 74 wt%, the first FP being an elastomeric co/terpolymer formed from 2+ monomers selected from the group consisting of: HFP, VDF and TFE, and
  - b. 5 to 95 wt% of a second FP having an F content of 73 to 78 wt%, said second FP comprising a terpolymer of copolymerized HFP, VDF and TFE units, wherein the second FP is thermoplastic,
- 2) extruding a layer of elastomeric material around the first tubular structure, and
- 3) applying a protective cover around the layer of extruded elastomeric material.

6. The applicable prior art fails to teach or suggest fuel hoses and methods of making them that have all of the features of the claims as summarized above.

7. The Terminal Disclaimer of 01 February 2005 has been entered. It has overcome the obviousness-type double patenting rejection(s) made in the office action dated 22 December 2004.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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***Information Disclosure Statement***

9. The information disclosure statement (IDS) submitted on 07 April 2005 was considered by the examiner. A copy of applicant's PTO 1449 form is enclosed.

***Potential Double Patenting Issue(s)***

10. The examiner notes that US SN. 10/823,893, now pregrant publication US-2004/0187948A1 was filed on the same day as this application and contains claims that, if found allowable, could raise one or more double patenting issues in view of this case.


It is suggested that applicant review SN.10/823,893 and take steps to maintain clear distinctions between its claims and the claims allowed here.

***Conclusion***

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.

  
S. M. Nolan-Rayford  
Primary Examiner  
Technology Center 1700

10823894(20050425)

**SANDRA NOLAN RAYFORD  
PRIMARY EXAMINER**